

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Mahony, *et al.*
Application No. : 10/594,370
For : **Electronically Controlled Film Transport Methods and Systems**
Filed : May 16, 2007
Examiner : Dowling, William C.
Art Unit : 2878
Confirmation No. : 9443

APPEAL BRIEF

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/Gina Hamrick/
Gina Hamrick

Sir:

Appellant IMAX Corporation filed a Notice of Appeal in this case on April 4,
2011. Appellant submits the attached Appeal Brief and fee. No other fee is believed due.
If another fee is due, however, please charge our Deposit Account No. 11-0855.

Respectfully submitted,

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I. Real Party In Interest

IMAX Corporation is the real party in interest for the presently-appealed application.

II. Related Appeals and Interferences

Appellant is unaware of any related appeals or interferences.

III. Status of Claims

Claims 1-25 are pending. Claims 10, 12-17, 19 and 21-25 stand twice rejected and are appealed.

Claims allowed: Claims 1-9.

Claims withdrawn: none.

Claims objected to: Claims 11, 18 and 20.

Claims canceled: none.

IV. Status of Amendments

To Appellant's knowledge, there are no un-entered amendments.

V. Summary of Claimed Subject Matter

The subject matter in each of the independent claims on appeal is set forth in the claims themselves. Examples of relevant portions of the specification and figures are cited below with respect to the independent claims on appeal. All citations are to the originally filed specification and figures, which are those from International Publication No. WO 2005/103811 of International Application No. PCT/IB2005/001049, of which the present application is a U.S. National Phase application.

Claim 10 is directed to a film transport system.¹ The film transport system includes a film transport path, an input drive assembly, an output drive assembly, an aperture positioned in the film transport path, at least one registration pin, a rotor, and a controller.² The film transport path is for transporting film.³ The input drive assembly is for advancing film through the film transport path.⁴ The input drive assembly includes a variable speed drive assembly and at least two sprockets.⁵ The output drive assembly is for advancing film out of the film transport path.⁶ The registration pin is capable of engaging at least one perforation in the film to secure a portion of the film in the aperture.⁷ The rotor has at least one rotor gap.⁸ The film is capable of forming a film loop in the rotor gap and the rotor gap is capable of moving the film loop to engage and disengage the film from the registration pin.⁹ The controller is for controlling a speed profile of the variable speed drive assembly to control a speed at which the film is fed into the rotor gap to form the film loop.¹⁰

Claim 21 is directed to a method of auto loading film in a film transport system. The method of auto loading film in the film transport system includes:

- engaging the film with an input drive assembly;¹¹

¹ See, e.g. paragraph [0044], Figures 1-3.

² See, e.g., paragraphs [0044]-[0046]; Figures 1-4.

³ See, e.g., paragraph [0066]; Figure 1.

⁴ See, e.g., paragraph [0044].

⁵ See, e.g., *id.*

⁶ See, e.g., *id.*

⁷ See, e.g., paragraph [0068].

⁸ See, e.g., paragraph [0044]; Figures 1-3.

⁹ See, e.g., paragraphs [0044], [0068].

¹⁰ See, e.g., paragraph [0061].

¹¹ See, e.g., paragraph [0067].

- threading film through a film transport path automatically by the input drive assembly;¹²
- receiving the film at an output drive assembly;¹³
- threading the film onto a film take-up system;¹⁴ and
- automatically creating at least one film loop and engaging at least one registration pin into at least one film perforation.¹⁵

Claim 23 is directed to a film transport system. The film transport system includes a film transport path, an input drive assembly, an output drive assembly, an aperture positioned in the film transport path, a film loop transport, at least one registration pin, and a controller.¹⁶ The film transport path is for transporting film.¹⁷ The input drive assembly is for advancing film through the film transport path.¹⁸ The input drive assembly includes a variable speed input drive assembly and at least two sprockets.¹⁹ The output drive assembly is for advancing film out of the film transport path.²⁰ The registration pin is capable of engaging at least one perforation in the film to secure a portion of the film in the aperture.²¹ The controller is for controlling a speed profile of the variable speed drive assembly to control a speed at which the film is fed into the film transport.²²

¹² See, e.g., *id.*

¹³ See, e.g., paragraphs [0044], [0067].

¹⁴ See, e.g., paragraphs [0068]-[0069].

¹⁵ See, e.g., *id.*

¹⁶ See, e.g., paragraphs [0044]-[0046]; Figures 1-4.

¹⁷ See, e.g., paragraph [0066]; Figure 1.

¹⁸ See, e.g., paragraph [0044].

¹⁹ See, e.g., *id.*

²⁰ See, e.g., *id.*

²¹ See, e.g., paragraph [0068].

²² See, e.g., paragraph [0061].

VI. Grounds of Rejection to Be Reviewed on Appeal

1. Has the Examiner erred in rejecting claims 21-22 under 35 U.S.C. § 102(b) in view of U.S. Patent No. 4,114,996 to Shaw (hereinafter “Shaw”)?²³

2. Has the examiner erred in rejecting claims 10, 12-17, 19 and 23-25 under 35 U.S.C. § 103(a) in view of Shaw and U.S. Patent No. 4,253,749 to Boudouris (hereinafter “Boundouris”)?

Appellant respectfully requests reversal of the rejections for the reasons set forth herein. The claims are grouped in the “Argument” section below.

VII. Applicable Law

A. Standard of Review

The Board’s role in any appeal from the Examiner is to review the “issues identified by appellant, and in light of the arguments and evidence produced thereon.”²⁴ “Specifically, the Board reviews the particular finding(s) contested by an appellant anew in light of all the evidence and argument on that issue.”²⁵

B. *Prima Facie* Case of Unpatentability

“The Examiner has the initial burden to set forth the basis for any rejection so as to put the patent applicant on notice of the reasons why the applicant is not entitled to a patent on the claim scope that he seeks – the so-called ‘*prima facie* case.’”²⁶ No burden

²³ The late Mr. William Shaw, the named inventor of U.S. Patent No. 4,114,996, was one of the founders of Appellant IMAX Corporation and extremely well regarded in the image projection field.

²⁴ *Ex Parte Frye*, 94 U.S.P.Q.2d 1072, 2010 WL 889747 at *4 (Bd. Pat. App. & Interf. 2010)

²⁵ *Id.*

²⁶ *Id.* at *3 citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984).

shifts to the applicant until the Examiner has addressed every element of a *prima facie* case of unpatentability.²⁷

To raise a *prima facie* case, the Examiner must come forward with evidence and an explanation of that evidence that “not only ... would reasonably allow the conclusion the examiner seeks, but also that the prior art compels such a conclusion if the applicant produces no evidence or argument to rebut it.”²⁸ Specifically, the Examiner has an obligation to develop an evidentiary basis for its findings.²⁹ The Examiner must not only have reached a sound decision, but have articulated the reasons for that decision.³⁰ Moreover, “[a]ll words in a claim must be considered” in formulating a *prima facie* case.³¹

“If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.”³²

C. Anticipation under 35 U.S.C. § 102

To establish *prima facie* anticipation under 35 U.S.C. § 102, the Office must identify each and every element as set forth and arranged in the claims in a single prior art reference, either expressly or inherently.³³ Where a reference “describes inventions

²⁷ *Oetiker*, 977 F.3d at 1445; *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2003).

²⁸ *In re Spada*, 911 F.2d 705, 707 n. 3 (Fed Cir. 1990).

²⁹ *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002).

³⁰ *Id.* at 1342.

³¹ *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

³² *Oetiker*, 977 F.3d at 1445.

³³ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

other than that claimed by the applicant,” the Examiner must designate portions of the reference relied on by the Examiner as nearly as practicable.³⁴

D. Obviousness under 35 U.S.C. § 103(a)

To establish *prima facie* obviousness under 35 U.S.C. § 103(a): (1) the scope and content of the prior art are to be determined; (2) differences between the prior art and the claims at issue are to be ascertained; (3) the level of ordinary skill in the pertinent art resolved; and (4) an apparent reason that existed at the time of invention to combine known elements as claimed must be articulated.³⁵ Articulation of the apparent reason must be explicit and have some rational underpinning.³⁶ Specifically, the Examiner must state the reasons for any rejection to afford applicants with the information necessary to judge the propriety of continuing the prosecution of applications.³⁷

Importantly, *prima facie* obviousness must be based on evidence. “As applied to the determination of patentability *vel non* when the issue is obviousness, ‘it is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section.’”³⁸

E. Claim Construction

During examination of an application, “[t]he PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever

³⁴ 37 C.F.R. § 1.104(c)(2) (“When a reference ... shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.”)

³⁵ *Graham v. John Deere Co.* 383 U.S. 1, 17-18 (1966); *KSR Int’l Inc. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

³⁶ *KSR Int’l*, 550 U.S. at 418 citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

³⁷ See 35 U.S.C. § 132(a).

³⁸ *Lee*, 277 F.3d at 1342 quoting *In re Grasselli*, 713 F.2d 731, 739 (Fed. Cir. 1983).

enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.”³⁹ Particularly, “[t]he PTO determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’”⁴⁰

VIII. Argument

Appellant respectfully submits that the Examiner improperly rejected claims 21 and 22 under 35 U.S.C. § 102(b) and claims 10, 12-17, 19 and 23-25 under 35 U.S.C. § 103(a). Accordingly, the appealed claims are grouped as follows:

- Group 1 – Claims 21 and 22.
- Group 2 – Claims 10, 12-17, 19 and 23-25.

A. Group 1 – The Examiner’s 35 U.S.C. § 102(b) Rejections are Erroneous

The Examiner made several procedural and factual errors in rejecting claims 21 and 22 as being anticipated by Shaw, each forming a basis for reversing the rejections of claims 21 and 22. These errors include (1) a failure to establish *prima facie* anticipation; and (2) incorrectly construing “threading” in claims 21 and 22.

1. The Examiner Failed to Establish *Prima Facie* Anticipation

The FIRST reversible error of the Examiner’s 35 U.S.C. § 102(b) rejections is that the Examiner failed to establish *prima facie* anticipation of claims 21 and 22. Claim 21 (and claim 22 by dependency) requires “threading film through a film transport path automatically by the input drive assembly.” The Examiner failed to establish *prima facie*

³⁹ *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

⁴⁰ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (*en banc*) quoting *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

anticipation of claims 21 and 22 because the Examiner failed to establish that this element of claims 21 and 22 is found in Shaw. Specifically, the Examiner ignored, and offered nothing to establish that, “threading film through a film transport path automatically by the input drive assembly” is found in Shaw.

In the “Detailed Action” section of the final Office Action, the Examiner failed to identify any portion of Shaw that the Examiner believes discloses this element.⁴¹ Even in the “Response to Arguments” section in which the Examiner addressed Appellant’s previous remarks⁴² on this issue, the Examiner did not identify any teaching of Shaw that the Examiner believes discloses this element.⁴³ Instead, the Examiner included statements without any support of evidence of record.⁴⁴

More egregiously, two Advisory Actions⁴⁵ mailed after the final Office Action failed to attempt to identify any portion of Shaw relied on for this element, even after Appellant called for substantial evidence on this point in an after-final Office Action response.⁴⁶ In the first Advisory Action, the Examiner stated that the “[r]esponse to rejection contains new **arguments** not previously presented which would require further consideration.”⁴⁷ After Appellant’s filed a Request for Supplemental Action under

⁴¹ Final Office Action, p. 2, ¶ 1.

⁴² See 10/1/2010 Amendment and Response to Non-Final Office Action, page 10.

⁴³ Final Office Action, page 5, paragraph 6.

⁴⁴ See *id.*

⁴⁵ 3/3/2011 Advisory Action and 3/24/2011 Advisory Action.

⁴⁶ February 10, 2011 Response under 37 CFR § 1.116, page 4 (“Should the Office continue to reject claims 21 and 22 over Shaw, the Applicants hereby call for “substantial evidence” pursuant to 37 C.F.R. § 1.104(d)(2) for all assertions of fact forming the bases for the rejection, including the statements on page 5, paragraph 6 of the final Office Action.”)

⁴⁷ 3/3/2011 Advisory Action, continuation sheet (emphasis added).

MPEP § 710.06,⁴⁸ the Examiner in a second Advisory Action refused to identify evidence, instead maintaining “that the previous rejection contain[s] proper rationales and motivation to combine references.”⁴⁹ The Examiner just refuses to comply with the requirements for establishing *prima facie* anticipation.

Because the Examiner failed to identify “threading film through a film transport path automatically by the input drive assembly” in Shaw, the Examiner failed to establish *prima facie* anticipation.⁵⁰ Since “examination [did] not produce a *prima facie* case of unpatentability, then ... [Appellant] is entitled to grant of the patent.”⁵¹ That is the case here.

Put plainly, the gap between the claims and the Examiner’s analysis is too great to support a legal conclusion of anticipation. Neither the Appellant nor this Board should have to speculate to bridge that gap.

For at least these reasons, Appellant requests that the rejection of claims 21 and 22 be reversed and remanded to the Examiner for allowance.

2. The Examiner Incorrectly Construed “Threading”

The SECOND reversible error of the Examiner’s 35 U.S.C. § 102(b) rejections is that the Examiner incorrectly construed “threading” in claims 21 and 22. Claim 21 is directed to a “method of **auto loading** film in a film transport system” that includes the “**threading** film through a film transport path **automatically** by the input drive assembly” element identified above. Based on the “Response to Arguments” section in the final Office Action, which did not identify any portion of Shaw relied upon to reject

⁴⁸ 3/21/2011 Request for Supplemental Action.

⁴⁹ 3/24/2011 Advisory Action.

⁵⁰ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d at 631.

⁵¹ *Oetiker*, 977 F.3d at 1445.

the claims, the Examiner construed “threading” as “transport[ing] film through a film advancement system” and, in any event, alleged “threading” is a broad recitation.⁵² This construction is wrong.

“Threading” is a term commonly used in the film projection industry to refer to loading or “setting up” film in a film transport **so that the film can subsequently be advanced (i.e. “running” the film) with a film transport**. That is, there is a distinct difference between “threading” film and “advancing” film – the former occurring before the latter.

The specification makes this clear. It states, “[a]uto loading may be defined, in one example, as the film transport system of the projection system being able to automatically thread film through the film transport path such that film appears at the output of the film transport system.”⁵³ After film is auto loaded by automatically threading film through the film transport path, “it is now possible that the projection system rotor 2 motor, sprocket 12 and 13 motors can be commanded to jog by the projectionist to get the film start frame to the start mark at the film transport input.”⁵⁴

The Appellant recognizes that language from the specification should not be read into the claims, but that is not necessary here – claim 21 itself is directed to a “method of **auto loading film** in a film transport system” not to a method of advancing or running film.

Accordingly, one of ordinary skill in the art, after reviewing the specification, would not construe “threading” as merely “transport[ing] film through a film

⁵² Final Office Action, page 5, paragraph 6.

⁵³ Paragraph [0066].

⁵⁴ Paragraph [0067].

advancement system.” Because the Examiner’s construction of “threading” is wrong, the rejections based on this construction are wrong.

In any event, Shaw does not disclose “threading film through a film transport path automatically by the input drive assembly.” Indeed, it is clear that Shaw does not relate to “auto loading film,” particularly by “threading film through a film transport path automatically by the input drive assembly,” as in claim 21. Instead, Shaw relates to advancing film after it has been loaded. Specifically, the **rolling** loop film transport mechanism in Shaw advances film using film loops, which occurs when the mechanism is running film – not when film is being loaded or being threaded into a film transport system.⁵⁵

That is, Shaw relates to projecting the film after it has been loaded, which prior to the innovations by the inventors of the present application occurred manually. Claim 21, by contrast, is directed to **auto loading film** by threading film through a film transport path **automatically**.

For at least these reasons, Appellant requests that the rejection of claims 21 and 22 be reversed and remanded to the Examiner for allowance.

B. Group 2 – The Examiner’s 35 U.S.C. § 103(a) Rejections are Erroneous

The Examiner also made several errors in rejecting claims 10, 12-17, 19 and 23-25 as being obvious in view of Shaw and Boudouris. These errors include a failure to establish *prima facie* obviousness by (1) failing to find that the cited references disclose or suggest each element claimed; and (2) failing to articulate an apparent reason to combine reference teachings.

⁵⁵ See Shaw, col. 2, lines 20-51.

1. The Examiner Failed to Find that the Cited References Disclose or Suggest Each Element Claimed

The FIRST reversible error of the Examiner's rejections under 35 U.S.C. § 103(a) is that the Examiner failed to find that the cited references (individually or in combination) disclose or suggest each element claimed. Thus, the Examiner failed to establish *prima facie* obviousness at least with respect to the *Graham* factors.

As an example, claim 10 requires "a controller for controlling a speed profile of the variable speed drive assembly to control a speed at which the film is fed into the rotor gap to form the film loop." Claim 23 requires "a controller for controlling a speed profile of the variable speed drive assembly to control a speed at which the film is fed into the film transport." The Examiner made no finding that Shaw and/or Boudouris teach or suggest "a controller," much less a controller controlling a speed profile of a variable speed drive assembly as in claims 10 and 23 (and by dependency claims 12-17, 19 and 24-25). Instead, the Examiner alleged that Boudouris discloses that "sprockets 12 and 15 are driven with a constant speed and sprockets 13 and 14 are driven intermittently" and concluded that "the complete mechanisms each comprises 'variable speed drive assemblies.'"⁵⁶ **The Examiner made no allegation and pointed to no evidence that Shaw or Boudouris discloses "a controller."**

Even after Appellant pointed out this issue to the Examiner and called for substantial evidence that supports the rejections, the Examiner refused to identify any portion of Shaw or Boudouris that disclosed "a controller."⁵⁷

⁵⁶ Final Office Action, page 4.

⁵⁷ See 3/3/2011 Advisory Action and 3/24/2011 Advisory Action; February 10, 2011 Response under 37 CFR § 1.116, pages 8-9.

Unfortunately, these elements are only examples of elements in the claims that the Examiner ignored and failed to identify any portion of Shaw or Boudouris that disclosed or suggested them. Additional claim elements for which the Examiner failed to identify any portion of Shaw or Boudouris as teaching or disclosing include the following:

- “a film transport path for transporting film” in claims 10 and 23;
- “an input drive assembly for advancing film through the film transport path” in claims 10 and 23;
- “an output drive assembly for advancing film out of the film transport path” in claims 10 and 23;
- “wherein the film forms a film loop in the rotor gap and the rotor gap is capable of moving the film loop to engage and disengage the film from the at least one registration pin” in claim 10 claim 10;
- “a film loop transport” in claim 23;
- all of claim 14;
- all of claim 15;
- all of claim 16;
- all of claim 17;
- “at least one air guide surface” in claim 19;
- “a valve for controlling the flow of air through the air tip, wherein the air from the air flow tip is directed at least in part by the air guide surface onto the film” in claim 19; and
- all of claim 25.

Clearly, the Examiner failed to “set forth the basis for any rejection so as to put the [Appellant] on notice of the reasons why the [Appellant] is not entitled to a patent on the claim scope that [the Appellant] seeks.”⁵⁸ These rejections cannot be affirmed. To do so would require patent applicants to wonder why the patent applicants’ claims are rejected and leave this Board with an insufficient record to review.

For at least these reasons, Appellant requests that the rejection of claims 10, 12-17, 19 and 24-25 be reversed. Furthermore, since Examination did not produce a *prima facie* case of unpatentability, Appellant requests that the application be remanded to the Examiner for allowance of claims 10, 12-17, 19 and 24-25.

2. The Examiner Failed to Articulate an Apparent Reason to Combine Reference Teachings

The SECOND reversible error in the Examiner’s 35 U.S.C. § 103(a) rejections is that the Examiner failed to articulate an apparent reason to combine reference teachings. Thus, the Examiner failed to establish *prima facie* obviousness by refusing to comply with the mandate in *KSR* by the United States Supreme Court to do so.

In concluding that claims 10, 12-17, 19 and 24-25 would have been obvious in view of Shaw and Boudouris, the Examiner made the following bald conclusion on page 4 of the final Office Action:

⁵⁸ See *Frye*, 2010 WL 889747 at *4.

It would have been obvious to one of ordinary skill in the art to provide variable motors to control the film sprockets and rotor speed in Shaw by the use of pairs of sprockets, as taught by Boudouris, in order to allow for control of the film feeding speed for forming the film loops, as desired. It further would have been obvious to allow for a change in timing operation, i.e. how fast each frame is positioned or stays in the aperture because it is well known to operate devices at different speeds on different occasions and situations.

First, note that this bald conclusion cites nothing but the Examiner's personal speculation in order to create claim limitations. This speculation is offered as an "apparent reason" that one of ordinary skill in the art would have had to combine teachings from Boudouris with those of Shaw. Speculation appearing long after the filing date is not evidence, much less "substantial evidence" of obviousness.⁵⁹ Accordingly, the Examiner failed to articulate an apparent reason supported by evidence of record that one of ordinary skill in the art would have combined teachings from Boudouris with those of Shaw. Because of the Examiner's failure to do so, the Examiner failed to establish *prima facie* obviousness of claims 10, 12-17, 19 and 24-25.

Second, the Examiner is silent on "reasonable expectation of success." "Reasonable expectation of success" is required to establish *prima facie* obviousness.⁶⁰

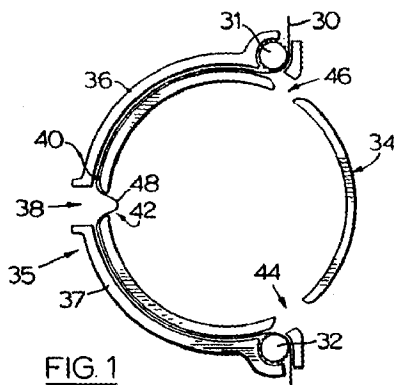
⁵⁹ *KSR Int'l*, 550 U.S. at 418 (objective evidentiary sources must be used "in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue."); *Lee*, 277 F.3d at 1342 ("Conclusory statements ... do not adequately address the issue of motivation to combine. ... [The] factual question of motivation is material to patentability, and [can] not be resolved on subjective belief of unknown authority."; *In re Zurko*, 258 F.3d 1379, 1385 (Fed Cir. 2001) ("This assessment of basic knowledge and common sense was not based on any evidence in the record and, therefore, lacks substantial evidence support.").

⁶⁰ *KSR Int'l*, 550 U.S. at 416-17; MPEP § 2143.02 ("Reasonable Expectation of Success is Required").

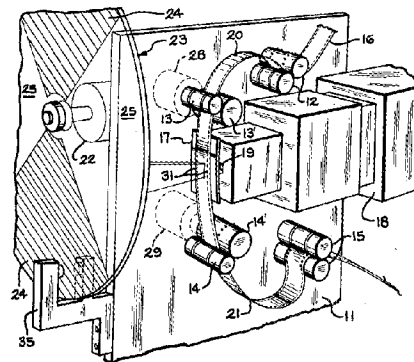
Because the Examiner is silent, the Examiner failed to establish *prima facie* obviousness of claims 10, 12-17, 19 and 24-25.

Third, the Examiner's proposal makes no sense. The Examiner proposes that one of ordinary skill in the art would have thought it obvious to modify the rotor and gap mechanism of Shaw (depicted below) with the rotor-less, sprocket system in Boudouris (also depicted below).

Shaw – Fig. 1



Boudouris – Fig. 1



The Examiner's proposal to modify Shaw with Boudouris would have plainly destroyed Shaw's rotor and gap feature, rendering it unsatisfactory for its intended use and changing its principle of operation.⁶¹ That is, no reason existed to use sprockets 13, 14 that advance film one frame to a light gate as in Boudouris with Shaw, which uses a rotor system with gaps to position one film frame at a projected aperture.⁶² Because the Examiner's proposal is nonsensical in view of the evidence of record, the Examiner failed to establish *prima facie* obviousness of claims 10, 12-17, 19 and 24-25.

⁶¹ MPEP § 2143.01(V)(VI) citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

⁶² See Boudouris, col. 3, lines 52-58, col. 4, line 51 – col. 5, line 7; Shaw, col. 2, lines 52-66.

Fourth, that “it **is** well known to operate devices at different speeds on different occasions and situations” is irrelevant to what **was** known and, thus, to the issue of obviousness. Moreover, the Examiner offered no evidence to establish that “it is well known to operate devices at different speeds on different occasions and situations” or for **any apparent reason** one would have had to modify Shaw and/or Boudouris with purported well known features. The Appellant specifically made the following request regarding this issue on pages 11-12 of the 10/1/2010 Amendment and Response to Non-Final Office Action:

Furthermore, the Office Action included the following Official Notice in rejecting claims 10, 12-17, 19, and 23-25: “Variable speed motors and the like are old and well known in the art.” Office Action, p. 3. The Applicants respectfully traverse the propriety of the above “Official Notice” of facts. The Office relied on “common knowledge” in the art without any evidentiary support in the record, which is impermissible. *See* MPEP § 2144.03(A). Furthermore, the facts asserted to be well known by the Office “are not capable of instant and unquestionable demonstration as being well-known” and thus Official Notice is improper. *Id.* Should the Office continue to reject the application, the Applicants request that the Office identify evidence of record on which the Office relies for asserting that the features of claims 10, 12-17, 19, and 23-25 were known. *See id.* citing *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test).

The Examiner ignored Appellant’s request for evidence.

Regardless of the Examiner’s failure to identify evidence of record, “a statement that modifications of the prior art to meet the claimed invention would have been ‘well within the ordinary skill of the art’ at the time the claimed invention was made’ because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of

obviousness without some objective reason to combine the teachings of the references.”⁶³

Because the Examiner offered no such objective reason here, the Examiner failed to establish *prima facie* obviousness of claims 10, 12-17, 19 and 24-25. Moreover, the purpose of sprockets 13 and 14 in Boudouris is to advance film as quickly as possible so that the frame settles on index pin 31 in front of the light gate so that the image can be projected.⁶⁴ Then, after a predetermined amount of time, the frame is quickly advanced to the next frame.⁶⁵ Neither Boudouris nor Shaw disclose or suggest varying the speed of film to feed film into the film transport for purposes of controlling the speed at which the film is fed.

For at least these reasons, Appellant requests that the rejection of claims 10, 12-17, 19 and 24-25 be reversed and remanded to the Examiner for allowance.

IX. Conclusion

For these reasons, the Appellant respectfully submits that the Examiner has failed to establish *prima facie* cases under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) to support rejections of anticipation and obviousness, respectively. Therefore, Appellant respectfully requests that these rejections be reversed.

Appellant hereby authorizes the U.S. Patent & Trademark Office to communicate with the undersigned concerning this application by electronic mail.

⁶³ MPEP § 2143.01(IV) citing *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (emphasis in original).

⁶⁴ See, e.g., Boudouris, col. 4, lines 27-63.

⁶⁵ See *id.*

Respectfully submitted,

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X. Claims Appendix

1. (Original) A film transport system comprising:
 - a film transport path for transporting film;
 - an input drive assembly for advancing film through the film transport path;
 - an output drive assembly for advancing film out of the film transport path;
 - an aperture positioned in the film transport path;
 - at least one registration pin capable of engaging at least one perforation in the film to secure a portion of the film in the aperture, wherein the at least one registration pin is capable of retracting to a non-engaging position; and
 - a controller for controlling the retraction of the at least one registration pin.
2. (Original) The film transport system of claim 1, wherein the input drive assembly comprises a variable speed drive assembly.
3. (Original) The film transport system of claim 2, wherein the variable speed drive assembly comprises at least one variable speed feed input sprocket, wherein the variable speed feed input sprocket is capable of controlling a speed of the film towards the at least one registration pin.
4. (Original) The film transport system of claim 1, wherein the input drive assembly comprises at least one input feed sprocket and the output drive assembly comprises at least one output sprocket.

5. (Original) The film transport system of claim 1, wherein the film transport system is used in a projection system.
6. (Original) The film transport system of claim 1, further comprising a rotor having at least one rotor gap, wherein the film forms a film loop in the rotor gap and the rotor gap is capable of moving the film loop.
7. (Original) The film transport system of claim 3, wherein the variable speed input sprocket is controlled by the controller.
8. (Original) The film transport system of claim 1, wherein when the at least one registration pin retracts to facilitate auto-loading of the film in the film transport system.
9. (Original) The film transport system of claim 6, wherein the at least one registration pin is retracted and the film loop collapses to allow movement of the film in the reverse direction to rewind the film back through the film transport system.
10. (Amended 10/1/2010) A film transport system comprising:
 - a film transport path for transporting film;
 - an input drive assembly for advancing film through the film transport path, wherein the input drive assembly comprises a variable speed drive assembly and at least two sprockets;
 - an output drive assembly for advancing film out of the film transport path;

an aperture positioned in the film transport path;

at least one registration pin capable of engaging at least one perforation in the film to secure a portion of the film in the aperture;

a rotor having at least one rotor gap, wherein the film forms a film loop in the rotor gap and the rotor gap is capable of moving the film loop to engage and disengage the film from the at least one registration pin; and

a controller for controlling a speed profile of the variable speed drive assembly to control a speed at which the film is fed into the rotor gap to form the film loop.

11. (Original) The film transport system of claim 10, wherein the at least one registration pin is capable of retracting to a non-engaging position.

12. (Original) The film transport system of claim 10, wherein the variable speed drive assembly comprises at least one variable speed feed input sprocket.

13. (Amended 10/1/2010) The film transport system of claim 10, wherein the at least two sprockets comprise at least one input feed sprocket and the output drive assembly comprises at least one output sprocket.

14. (Original) The film transport system of claim 10, wherein the speed profile of the variable input drive assembly is capable of being adjusted during operation of the film transport system.

15. (Original) The film transport system of claim 14, wherein the speed profile of the variable input drive assembly is changed to accommodate a changing condition of the film.

16. (Original) The film transport system of claim 10, wherein the film transport system is capable of transporting film at different frame rates.

17. (Original) The film transport system of claim 10, wherein the film transport system is capable of transporting a plurality of film formats.

18. (Original) The film transport system of claim 10, wherein a film frame position in the aperture is capable of being adjusted by at least one film perforation increment during operation of the film transport system.

19. (Original) The film transport system of claim 10, further comprising an air jet system comprising:

airflow tip for directing air;

at least one air guide surface;

a valve for controlling the flow of air through the air flow tip, wherein the air from the air flow tip is directed at least in part by the air guide surface onto the film to prevent at least in part longitudinal bending of the film during the formation of the film loop.

20. (Original) The film transport system of claim 10, wherein the rotor has a radius that is less than a curvature of a film support surface of the aperture and a center of the rotor is in line with an aperture optical axis center line, and wherein the at least one registration pin extends beyond an outer peripheral surface of the rotor.

21. (Amended 10/1/2010) A method of auto loading film in a film transport system, comprising:

- engaging the film with an input drive assembly;
- threading film through a film transport path automatically by the input drive assembly;
- receiving the film at an output drive assembly;
- threading the film onto a film take-up system; and
- automatically creating at least one film loop and engaging at least one registration pin into at least one film perforation.

22. (Original) The method of claim 21, further comprising automatically positioning a film start frame into an aperture of the film transport system.

23. (Amended 10/1/2010) A film transport system comprising:

- a film transport path for transporting film;
- an input drive assembly for advancing film through the film transport path, wherein the input drive assembly comprises a variable speed input drive assembly and at least two sprockets;

an output drive assembly for advancing film out of the film transport path;
an aperture positioned in the film transport path;
a film loop transport;
at least one registration pin capable of engaging at least one perforation in the film
to secure a portion of the film in the aperture; and
a controller for controlling a speed profile of the variable speed drive assembly to
control a speed at which the film is fed into the film transport.

24. (Original) The film transport system of claim 23, wherein the film transport is a rotor with at least one rotor gap.

25. (Original) The film transport system of claim 23, wherein the film transport is a linear loop transport.

XI. Evidence Appendix

None.

XII. Related Proceedings Appendix

None.